

SK TU4-POT-140-B

Part number: 275 281 111

PotentiometerBox (Control box with 24 V mains unit)

NOTICE

Validity of this document

This document is only valid in combination with the operating instructions for the relevant electronic drive technology and under strict compliance with the safety and warning instructions which they contain. Safe commissioning of this module and the electronic drive technology depends on the availability of this information.

Scope of delivery

1 x	Module	SK TU4-POT-140-B
1 x	Mains voltage cable set	brown / black* * incl. fuse (5A slow-acting)
1 x	24 VDC cable set	brown / blue
1 x	PE cable	green / yellow
1 x	Digital/analogue cable set	black / grey / white
4 x	Hexagon socket screw	M4 x 40
<i>Accessories required</i>		
1 x	Connection unit	SK TI4-TU-NET
		Part No. 275 280 100)



Field of use

Control unit with integrated mains unit for mounting on, or in the immediate vicinity of a decentralised electronic drive technology frequency inverter. The integrated mains unit provides a 24 V supply which can be used to supply the connected drive electronics. In addition, the buttons on the front and the potentiometer enable the simple control of a frequency inverter by means of an enabling signal (right / left), stop signal and continuous setpoint setting (0-100%). The integrated LEDs on the two direction buttons indicate the actual enabling direction. A further LED (labelled with 24 V) indicates that the mains unit is ready for operation.

The entire scope of functions of the module is optimised for use with an SK 2x5E frequency inverter.

Technical Data

Temperature range	-25°C ... 50 °C
Temperature class	Class 3K3

Vibration resistance	3M7
Protection class	IP55
Dimensions [mm]*	HxWxD 105 x 136 x 91

* module mounted on the connection unit

Designation	Terminal	Data
Module power supply	L1 + L2	380 V AC ... 500 V AC
Output voltage (load capacity)	43 + 40	24 VDC ± 10 % (≤ 420 mA)
Analogue input - reference voltage	11	10 VDC ±0.2 V, ≤ 5 mA (output)

Technical Information / Datasheet		SK TU4-POT-140-B			
Potentiometer unit		TI 275281111	V 1.0	5315	EN

Designation	Terminal	Data
Frequency output	B1	PLC-compatible as per EN 61131-2 Low: 0 V, High: 24 V Clock frequency: approx. 1 – 32 kHz
Digital output for enabling (ON-R / ON-L)	B2 / B3	Low = 0 V, High = 24 V; max. 20 mA

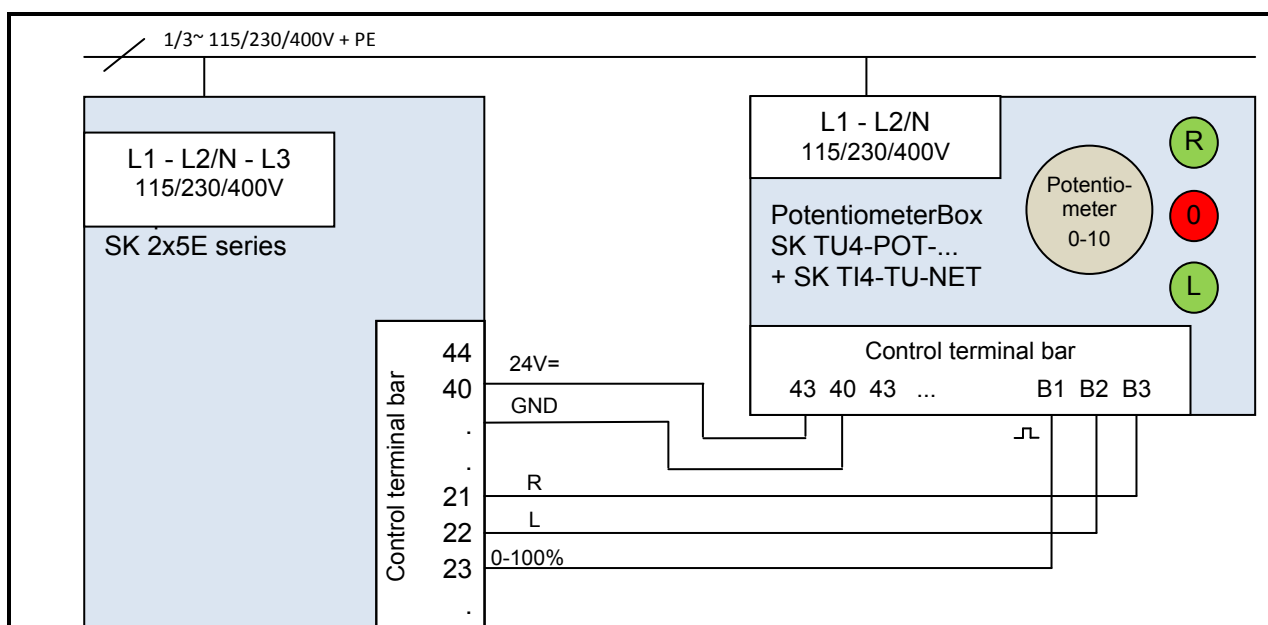
Assembly

The module must be plugged on to the relevant connection unit (SK TI4-TU- ...) and connected using the four enclosed M4 x 40 mm screws. Installation details can be found in the *Technical Information / Data Sheet* for the relevant connection units.

Connections

Connection of the signal and control cables is made via the connection unit SK TI4-TU-NET(-C).

Connection examples (SK 2x5E)



DIP switch settings (SK 2x5E - S1):

DIP3 = off, DIP4 = on, DIP5 = off

Therefore no further parameterisation is necessary!

or

recommended parameter setting,

P400 [07] = 1

P420 [02] = 2

SK 2x5E - S1: DIP1-8 = off

P420 [01] = 1

P420 [03] = 26

Further documentation (www.nord.com)

Document	Name
BU 0180	Frequency inverter manual SK 180E, SK 190E
BU 0200	Frequency inverter manual SK 2xxE

Document	Name
TI 275280100	Connection unit SK TIE4-TU-NET